

Brave New Symphony

Wireless technology becomes
a Concert Companion.

by Paul Horsley

When Roland Valliere resigned his post as executive director of the Kansas City Symphony in June 2002, colleagues both inside and outside the orchestra world didn't quite know what to make of it. The 49-year-old native of Rhode Island, who had previously served with orchestras in Omaha, the Hudson Valley, Syracuse, and New Hampshire, spoke of harnessing technology in ways that would take the symphonic experience into the 21st century—of finding a real-time equivalent to the audio guides and supertitles of the museum and opera worlds.

"I've known Roland a long time," says Lawrence Tamburri, Pittsburgh Symphony president, CEO, and managing director, who was one of the few people with whom Valliere had shared his embryonic idea a year earlier. "Since I've been around him, he's always been intrigued with new ideas and with electronic devices. He always has gadgets. His Palm Pilot always had more power than mine."

So what was Valliere up to? Skeptical colleagues had their answer soon enough. In March 2003 Valliere announced that he was conducting a test of something called Concert Companion, at a performance of the Kansas City Symphony.

While guest conductor Michael Stern led the orchestra in Stravinsky's *Firebird* Suite, six participants, each equipped with a Sony Clie personal digital assistant

(PDA), sat in the balcony of the Lyric Theatre. On their handheld devices appeared a series of screens giving a play-by-play about the music, not unlike the color commentary for a baseball game. "With a mysterious twisting in their deepest, most lugubrious register, muted cellos and double basses launch this cobbled-together Russian fairy tale of good versus

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Audience members can follow the action of *The Firebird* as Robert Winter's running commentary is transmitted wirelessly, silently, to their personal digital assistants.

evil." Thus read screens at the opening of the suite. Or: "The seductive string pizzicatos (watch plucking replace bowing) now emerge into the foreground with the chattering clarinet and flute."

In a sound booth behind the balcony, a team including UCLA techno-whiz Robert Winter—who authored the running text—sat at a server computer with a marked-up *Firebird* score and manually changed the screens in real time as the music was played. Each new screen was transmitted to the six PDAs using wireless technology that had become available literally only months before.

Thus was born Concert Companion, which Valliere had conceived during his years in Kansas City, where he had observed a 50 percent attrition rate among first-time orchestra attenders. Equipped with a 2002 Classical Music Consumer Segmentation Study by the market research firm Audience Insight, Valliere also knew that—in the fifteen orchestra markets studied (Kansas City among them)—one-quarter of adults considered themselves "potential orchestra ticket buyers," while only half who expressed interest

actually attended concerts. "The audience has a desire for culture," says Valliere, now technology initiative director for the Kansas City Symphony, "but they're not acting on that desire. One reason is because they don't think they have time. And the other thing is that they don't think they have the knowledge."

Concert Companion, which has also been tested at the Aspen and Saratoga music festivals, addresses both of these problems because it presumes no musical knowledge. Its technology takes the listener along on a real-time journey that requires no advance reading or during-the-music shuffling of program notes.

"The music is grand and glorious, we can all agree on that," says Winter, a sometime academic who is now a member of UCLA's Center for Digital Arts. "But the question is, how do you establish the connection?" Winter is famous for his persuasive ways with students, concert audiences, and musical novices. Now he's met his greatest challenge: creating content to engage listeners in a minute-by-minute

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musical experience. The best shot, he says, "is to try to enhance the experience while they're there."

Coming Attractions

Concert Companion—"CoCo" for short—is still in the development stage. Enhancements like multiple levels of information, graphics, and a QuickTime video have been added to the prototype since the initial Kansas City test. (The product could ultimately contain advance program notes and live video streams from cameras onstage.) Additional tests in several major markets are in the planning stage.

With advance coverage from media heavyweights including *The New York Times*, the concept seems to be gaining

momentum. Concert Companion's development team includes two Silicon Valley software firms, Kinoma and Tribeworks, which have taken existing PDA applications and customized them to ever-more-specific uses. Funding of more than \$400,000 for the project so far has come from the Knight, Mellon, and Packard foundations, plus Kansas City contributors like DST Systems, and the Hall Family Foundation.

Valliere plans to form a company this summer with the involvement of Winter and UCLA media specialist Peter Bogdanoff. It will develop content—for about 250 musical works initially—to be offered in the form of software for off-the-shelf PDAs using the Palm OS operating system. After a two-year rollout phase, they

hope to have enlisted some 50 orchestras in the project, and begun exploring the manufacture of a dedicated, single-purpose device that could bring the cost per PDA from \$600 to about \$300. Orchestras will purchase or rent the PDA devices and have the option of licensing the content to run on them from Concert Companion. Patrons will then rent the handheld devices for about \$7 per concert, or receive the right to use them through a subscription deal worked out by the orchestra. Valliere said that when orchestras get up to speed, Concert Companion should require no hidden personnel costs. "Our goal is for it to be operated with existing staff," he says, adding that usually a librarian or other member can be enlisted to run the laptop. "It ought to require just one operator."

According to Tribeworks President and CEO Duncan Kennedy, Concert Companion results from the confluence of three emerging technologies: the PDA, wireless (wi-fi) local network systems, and advances in server-to-handheld technology. "We will continue to improve on the software 'feature set,' as we all understand better what it is that audiences want," says Kennedy. "One of the most exciting features that I see is the ability for an orchestra to customize the performances and the content that's presented."

The idea of applying the various technologies to orchestras struck Bogdanoff during a Tribeworks conference in January of 2003. He had worked with Winter on CD-ROM projects. "This whole wireless thing is trying to take off now," he says, noting that some Broadway shows are providing closed captioning for hearing-impaired patrons via wireless transmissions to handheld monitors.

Kennedy believes wireless devices will eventually transcend the performing arts for use, say, at sporting events, and that the Concert Companion technology may very well be adapted for such applications.

Help, Please

Indeed, nearly everyone who has taken part in a Concert Companion demonstration has been struck by its innovative approach. "Roland has taken a risk on our behalf, but I think it's a worthy risk to take," says Don

Web Sightings

www.operaglassnetworks.com
www.personalcaptioning.com/

As Concert Companion targets the needs and interests of classical music audiences, some other companies are staking their claims with different entertainment options. OperaGlassNetworks has developed a handheld wireless system for use in sports stadiums. Instead of screens changing with the music, fans can watch game footage, check out stats, or even get the low-down on team cheerleaders. The system may also be called into play for other live events. Check the Products section of the company's web site for a demonstration.

The Personal Captioning System made its Broadway debut during last year's run of the musical *Big River* and went on the road with the touring company. The wireless handheld monitor, developed for hearing-impaired patrons, displays dialogue and lyrics in real time—everything's synched to lighting cues. The company has also introduced a tiny, clip-on captioning device that attaches to eyeglass frames and projects, or "floats," text a few inches in front of the eyes. (See the Theater Captioning section of the web site for photos.) Way cool.

—Rebecca Winzenried

The screenshot shows the Opera Glass Networks website. On the left is a vertical navigation menu with buttons for COMPANY, MANAGEMENT, EXPERIENCE, PRODUCTS, NEWS, and CONTACT US. The main content area is titled 'Company' and includes the following text:

Company
 Founded July 2001, OGN has emerged as the leading provider of stadium-based, portable media and enhanced broadcast systems to the sports and live event entertainment market. We build, license and own location-based and mobile portals for distributed user access based local, wireless and wireless networks ("OGN") to PC, TV, PDA and smart handheld devices. We partner with rights holders/venue management to provide scalable, enhanced broadcast solutions with utility access diverse distribution platforms and extensive electronic devices - inside and out of the facility.

Our mission is to make a live event, contextual, multimedia content, information and services available at all times, in all places over any personal computing device.

OGN's applications enhance the user experience, generate new incremental revenue, improve rights holder value, increase transactions, engage marketing leads, provide security and drive new sponsorship opportunities.

We are building a worldwide network of live sport and event-related multimedia "hotspots" and next generation cellular programming.

Why OGN?

- Experience** - No other company has OGN's hands-on experience, reputation and customer commitment
- Expertise** - OGN really understands the business model, market and revenue opportunities. Where others speculate, we've been there.
- Economics** - OGN builds highly-scalable, stable systems with the lowest capital installation, operation and maintenance cost possible. We understand where ROI begins.
- Sponsorship** - OGN knows how to attract and secure sponsorship underwriting.
- Scale** - OGN builds its open standard systems for scale and

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Roth, president and CEO of the Aspen Music Festival and School, who was present for the test there last summer. "To me the beauty of music is that it is abstract, it bypasses language. But that is the hard-line, musicians' and cognoscenti's response, whereas the response of the novice is that 'I'd like all the help I can get.'"

Post-demonstration surveys at the Saratoga Performing Arts Center—following an August 28 test specifically designed for musical non-specialists—found that 80 percent of participants experienced "positive change" about the piece heard, as opposed to 33 percent of the musically savvier group who participated in the Aspen test a month earlier. The Saratoga demo involved a Philadelphia Orchestra performance of *Firebird*, while the Colorado test revolved around an Aspen Chamber Symphony performance of Beethoven's Fifth Symphony. Twelve audience members took part in each trial.

"The people who were most interested were people who were very new to the music," Roth says. "That's frankly where we need the help." Lay music lover Barnett Helzberg, who took part in the earlier Kansas City test, agrees. "I have much more knowledge now about what the [*Firebird*] story is, and what's in it, and why and what it represents," says Helzberg, a retired diamond magnate whose wife, Shirley, is president of the Kansas City Symphony Board of Trustees.

Initial tests signaled that developers needed to back off somewhat on content, according to Bogdanoff. "There is sort of a sweet spot between enough information and too much information," he says, "and that's something we had to find out from our tests... There was too much to read." The sensory load in a concert-hall setting can make it hard to focus on reading, he says. "The text has to be simpler."

Yu-Ling Cheng, who observed the Aspen demonstration as an American Symphony Orchestra League Orchestra Management Fellow, welcomes the Concert

Companion technology but hopes it will offer more. "I thought it would be a great educational tool for children if they could develop it more," she says. "But I thought it could be more technologically savvy." Cheng says she would like to see more features and functions. "I would want to get the score on there, but I don't know if that's possible. It might also be fun to read reviews of historical performances."

Edward Cambron, Philadelphia Orchestra vice president for marketing and patron services, noted the difference in reactions among subjects at Saratoga. "Those people who are already part of the orchestra world don't understand it. The people who are the target audiences, people who don't go to concerts regularly, really get it." He likes the way the tool grants empowerment to those without music degrees. "The classical music world is still really conservative. It still really evaluates things in terms of the insider's view. This changes that a little bit," he says. "This allows you to develop different content for different listeners, instead of one size fits all—because one size doesn't fit all."

Cambron envisions Concert Companion becoming a part of a special value-added series for those interested in new approaches. "I would love to have a whole bunch of different channels, so that people who want the MTV-style abstract experience, give them that, people who want the more musicological text, give them that, people who want to just pick up forms and themes, give them that."

Finding the right mix will be key, Valliere says. Which is why he and his team are expending so much effort on developing a platform that will allow growth. "At the end of the day, it's going to be the quality of content" that determines the success of the project, he says. "It's kind of like Columbus leaving and not knowing where he's going. Innovation doesn't happen in a straight line." ∞

Paul Horsley is classical music critic for *The Kansas City Star*.